ICSE Class 8 Maths Selina Solutions Chapter 8: The balance between profit and loss is crucial to corporate operations. Students are likely aware that Business A turned a profit of fifty lakhs in 2018. But are they aware of the formula used to determine profit and loss?

Students must read ICSE Class 8 Chapter 8, which covers profit, loss, and discount, to complete this assignment. Students will find questions about issues that arise in everyday life in this chapter.

ICSE Class 8 Maths Selina Solutions Chapter 8 Overview

ICSE Class 8 Maths Selina Solutions Chapter 8 on profit and loss provides comprehensive guidance for understanding and mastering fundamental concepts in commerce and mathematics. It covers topics such as calculating cost price, selling price, profit, and loss through clear, step-by-step solutions.

The chapter includes a range of practical problems that enable students to apply these concepts in real-world scenarios, fostering a deeper understanding of financial transactions and preparing them effectively for exams. By using these solutions, students can strengthen their problem-solving skills and build a solid foundation in mathematical principles related to profit and loss.

ICSE Class 8 Maths Selina Solutions Chapter 8

Here we have provided ICSE Class 8 Maths Selina Solutions Chapter 8 for the ease of students so that they can prepare better for their upcoming exams -

Question 1.

Megha bought 10 note-books for Rs.40 and sold them at Rs. 4.75 per note-book. Find, her gain percent.

Solution:

C.P. of 10 note-books = Rs.40

S.P. of 10 Note-books @ Rs.4.75 per note book

=4.75×10=Rs.47.50

Gain = S.P. – C.P.

= Rs.47.50 – Rs.40 = Rs.7.50

Gain

=754%=1834%

Question 2 .

A fruit-seller buys oranges at 4 for Rs. 3 and sells them at 3 for Rs.4. Find his profit percent.

Solution:

Let number of oranges bought = 12

(Note: L.C.M. of 4 and 3 = 12)

∴ C.P. of oranges=Rs.

34×12=Rs.9

And S.P. of oranges

=Rs.43×12=Rs.16

Profit = 16 – 9 = Rs.7

Profit%

$$= \frac{\text{Profit}}{C.P} \times 100$$
$$= \frac{7}{9} \times 100 = \frac{700}{9}\% = 77\frac{7}{9}\%$$

Question 3.

A man buys a certain number of articles at 15 for Rs. 112.50 and sells them at 12 for Rs. 108

Find:

(i) His gain a percent;

(ii) The number of articles sold to make a profit of Rs.75.

Solution:

Let number of articles bought = 60

∵ L.C.M of 15 and 12= 60

∴ C.P. of the articles

$= \text{Rs} \cdot \frac{112.50}{15} \times 60$
$= \text{Rs.} \frac{112.50 \times 60}{15} = 112.508 \times 4 = \text{Rs.}450.00$
and S.P. of the articles

$= \text{Rs} \cdot \frac{108}{12} \times 60$
$= Rs.108 \times 5 = Rs.540$
(i) To find his gain as percent;

Gain = S.P − C.P. = Rs.540 − Rs.450 = Rs.90

$\therefore \quad \text{Gain } \% = \frac{\text{Gain}}{C.P} \times 100$
$= \frac{90}{450} \times 100 = \frac{100}{5} = 20\%$

Question 4.

A boy buys an old bicycle for Rs. 162 and spends Rs.18 on its repairs before selling the bicycles for Rs. 207. Find his gain or loss percent.

Solution:

Buying price of the old bicycle = Rs.162

Money spent on repairs = Rs.18

Real C.P. of the bicycle = 162+18=Rs.180

S.P. of the bicycle = Rs.207

Profit= S.P. – C.P. = 207-162=Rs.45

Question 5.

An article is bought from Jaipur for Rs.4800 and is sold in Delhi for Rs. 5,820. If Rs. 1,200 is spent on its transportations, etc. find the loss or the gain as percent.

Solution:

Cost price = Rs.4,800

Selling Price = Rs.5,820

Transport etc. charges = Rs.1,200

Total cost price = Rs 4800 + Rs. 1,200 = Rs. 6,000

Loss = Rs. 6000 – Rs.5820 = Rs. 180

$$\therefore Loss\% = \frac{180}{6000} \times 100 = 3\%$$

Question 6.

Mohit sold a T.V. for Rs. 3,600; gaining one-sixth of its selling price. Find:

(i) The gain

(ii) The cost price of the TV.

(iii) The gain percent.

Solution:

S.P. of T.V. = Rs.3,600

(i) To find the gain

Gain

=16 of (3600)=16×3600=Rs.600

Thus, gain = Rs.600

(ii) To find the cost price of the TV.

Cost price = S.P – gain = 3600 – 600 = Rs.3000

(iii) To find the gain percent.

Gain %

$$= \frac{600}{3000} \times 100 = \frac{60}{3} = 20\%$$

=6003000×100=603=20%

Question 7.

By selling a certain number of goods for Rs. 5,500 a shopkeeper loses equal to one-tenth of their selling price. Find:

(i) The loss incurred

(ii) The cost price of the goods

(iii) The loss as percent.

Solution:

S.P. = Rs. 5,500

(i) Loss incurred:

$Loss$=110 of ($S.P.$)=110×5500=$Rs.$550)

Loss incurred = Rs.550

(ii) Cost price:

C.P = Rs.5,500 + Rs.550 = Rs.6,050

(iii) Loss as percent:

$$Loss\% = \frac{550 \times 100}{6050} = \frac{10 \times 100}{110} = \frac{100}{11} = 9\frac{1}{11}\%$$

Question 8.

The selling price of a sofa-set is

45

times of its cost price. Find the gain or the loss as percent.

Solution:

Let the cost price (C.P) = 1

S.P.

$= 1 \times \frac{4}{5} = \frac{4}{5}$

$\therefore loss = 1 - \frac{4}{5} = \frac{5-4}{5} = \frac{1}{5}$
[∵Loss = C.P. − S.P.]

$\therefore Loss\% = \frac{\text{Loss}}{\text{CP.}} = \frac{\frac{1}{5}}{1} \times 100 = \frac{1}{5} \times 100 = 20\%$

Question 9.

The cost price of an article is 4/5 times of its selling price. Find the loss or the gain as percent.

Solution:

Let S.P. = 1

C.P.

$= \frac{4}{5} \times 1 = \frac{4}{5}$
Formula for finding the gain% is given below,

∴ Gain = Selling Price − Cost Price

I.e. Gain = S.P. − C.P.

$= 1 - \frac{4}{5} = \frac{5-4}{5} = \frac{1}{5}$

$\text{Gain } \% = \frac{\text{Gain}}{C.P} \times 100 = \frac{\frac{1}{5}}{\frac{4}{5}} \times 100$
$= \frac{1}{5} \times \frac{5}{4} \times 100 = 25\%$

Question 10.

A shopkeeper sells his goods at 80% of their cost price. Find the percent gain or loses.

Let C.P of good = Rs.100

∴ S.P. of goods

$= \frac{80}{100} \times 100 = Rs.80$

Loss = C.P − S.P = Rs.100 − Rs.80 = Rs.20

Formula for finding Loss%

$= \frac{\text{Loss}}{C.P} \times 100 = \frac{20}{100} \times 100 = 20\%$

Question 11.

The cost price of an article is 90% of its selling price. What is the profit or the loss as percent?

Solution:

Let S.P of the article = Rs.100

∴ C.P. of the article

$= \frac{90}{100} \times 100 = \text{Rs}.90$

Gain = Rs.100 − Rs.90 = Rs.10

Gain

$\% = \frac{\text{Gain}}{C.P} \times 100$

$= \frac{10}{90} \times 100 = \frac{100}{9}\% = 11\frac{1}{9}\%$

Question 12.

The cost price of an article is 30 percent less than its selling price. Find the profit or loss as percent.

Solution:

Let S.P of the article = Rs.100

30% of S.P.

$= \text{Rs} \cdot \frac{30}{100} \times 100 = Rs.30$

∴ C.P. of the article = 100 − 30 = Rs.70

Profit = S.P − C.P

Rs.100 − Rs.70 = Rs.30

Profit

$\% = \frac{\text{Profit}}{C.P} \times 100 = \frac{30}{70} \times 100 = \frac{300}{7}\% = 42\frac{6}{7}\%$

Question 13.

A shop-keeper bought 300 eggs at 80 paisa each. 30 eggs were broken in transaction and then he sold the remaining eggs at one rupee each. Find his gain or loss as percent.

Solution:

C.P. of 300 eggs at 80 paise each

$= 300 \times 80 = 2400 paise = Rs.240$

No. of eggs which were broken in transaction = 30

Remaining eggs = 300 − 30 = 270

S.P. of eggs at Rs.1 each

$= 270 \times 1 = \text{Rs.}270$

Gain = S.P − C.P. = Rs.270 − Rs.240 = Rs.30

Gain

$\% = \frac{Gain}{C.P} \times 100$
$= \frac{30}{240} \times 100$
$= \frac{100}{8}\% = 12.5\%$

Question 14.

A man sold his bicycle for Rs. 405 losing one-tenth of its cost price, find:

(i) Its cc price;

(ii) The loss percent

Solution:

(i) Let C.P. of the bicycle = Rs. x

∴ Loss

$= \text{Rs} \cdot \frac{x}{10}$

S.P. = C.P. − Loss

$= x - \frac{x}{10}$

But, we are given S.P. = Rs.405.

$\therefore \quad x - \frac{x}{10} = 405$

$\Rightarrow \frac{10x-x}{10} = 405$

$\Rightarrow \frac{9x}{10} = 405 \Rightarrow x = 405 \times \frac{10}{9}$

$\Rightarrow \quad x = \frac{4050}{9} \Rightarrow x = 450$

∴ C.P. =Rs.450

(ii) The loss percent.

$Loss = \frac{x}{10}$

$= \frac{450}{10}$

[∵ Substituting the value of x=450]

= Rs.45

Loss%

$= \frac{\text{Loss}}{CP.} \times 100 = \frac{4500}{450} = 10\%$

=Loss$CP.$×100=4500450=10%

Question 15.

A man sold a radio-set for Rs.250 and gained one-ninth of its cost price. Find;

(i) Its cost price;

(ii) The profit percent.

Solution:

(i) Let C.P. of the radio –set = Rs. x

Gain

$= \text{Rs} \cdot \frac{x}{9}$

S . P .

$= \text{Rs.}\left(x + \frac{x}{9}\right) = \left(\frac{9x+x}{9}\right)\text{Rs.} = Rs \cdot \frac{10x}{9}$

But, we are given S.P. of the radio-set =Rs.250

$\therefore \quad \frac{10x}{9} = 250$

$\Rightarrow x = 250 \times \frac{9}{10} \Rightarrow x = 25 \times 9 \Rightarrow x = 225$

$\Rightarrow$x=225

$\therefore$ C.P. of the radio set =Rs225

(ii) The profit percent.

Profit = Rs.

$\frac{x}{9}$

$= \text{Rs} \cdot \frac{225}{9}$

[$\because$ Substituting the value of x=225]

= Rs.25

Profit

$\% = \frac{\text{Profit}}{\text{C.p}} \times 100$

$= \frac{25}{225} \times 100 = \frac{25 \times 100}{225} = \frac{100}{9}\%$

$= 11\frac{1}{9}\%$

Benefits of ICSE Class 8 Maths Selina Solutions Chapter 8

ICSE Class 8 Maths Selina Solutions Chapter 8 on profit and loss offer several benefits to students:

Structured Learning: The solutions provided in Selina's textbook are structured and organized, making it easier for students to follow step-by-step solutions to problems related to profit and loss.

Clarity in Concepts: Each solution is designed to clarify the underlying concepts of profit, loss, cost price, selling price, and related formulas. This helps students grasp the fundamentals effectively.

Variety of Problems: The chapter includes a variety of problems ranging from simple to complex, which helps in developing a deeper understanding of the topic and prepares students for different types of questions.

Application of Formulas: Students learn to apply specific formulas and methods to solve problems related to profit and loss, thereby enhancing their problem-solving skills.

Real-life Applications: Understanding profit and loss is essential in real-life scenarios such as business transactions, buying and selling goods, etc. The chapter helps students relate mathematical concepts to practical situations.

Preparation for Exams: Since ICSE exams are based on Selina textbooks, practicing these solutions helps students prepare thoroughly for their exams. They become familiar with the types of questions that could be asked and how to approach them.

Self-assessment: The solutions allow students to self-assess their understanding and progress. By comparing their answers with the provided solutions, students can identify areas where they need more practice or clarification.